



**UNITED STATES ACCESS BOARD**

# FY 2004 Annual Report



January 2005

**A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIGN**

# UNITED STATES ACCESS BOARD

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## FY 2004 ANNUAL REPORT

The Access Board is an independent Federal agency committed to design that is accessible to persons with disabilities. Created over 30 years ago to ensure access to federally funded facilities, the Board is now a leading source of information on accessible design. The Board is structured to function as a coordinating body among Federal agencies and to directly represent the public, particularly people with disabilities. Half of its members are representatives from most of the Federal departments. The other half is comprised of members of the public appointed by the President, a majority of whom must have a disability.

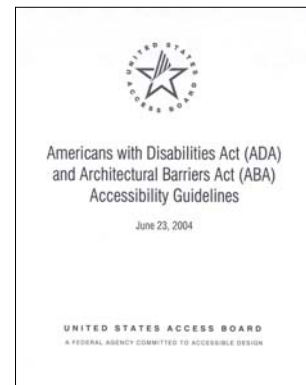
The Board develops and maintains design criteria covering access to the built environment, transit vehicles, telecommunications, and electronic and information technology under several different laws, including the landmark Americans with Disabilities Act (ADA). Other Board services include technical assistance and training on its accessibility guidelines and standards and enforcement of design standards covering federally funded facilities. The Board also promotes accessibility through targeted outreach, dissemination of information, and sponsored research.

### ACCESSIBILITY GUIDELINES AND STANDARDS

The Board maintains a varied rulemaking agenda developing or updating accessibility criteria on several fronts simultaneously. In FY 2004, the Board completed a comprehensive update of its guidelines for facility design while advancing work on new guidelines for public rights-of-way and passenger vessels. In addition to its own agenda, the Board was involved in the development of standards for voting systems by the Election Assistance Commission.

#### Updated Facility Guidelines

The leading accomplishment of the year was the Board's publication of new guidelines for buildings and facilities. These guidelines overhaul and greatly improve design criteria for private and public sector facilities covered by the ADA, as well as Federal sector buildings subject to the Architectural Barriers Act (ABA). The release of the guidelines on July 23<sup>rd</sup> was the culmination of a comprehensive, decade-long review and update that involved extensive coordination with a wide range of interested groups and stakeholders, forums for public input, and countless hours of deliberation and revision. The Board held a press conference and briefing on the new guidelines at the National Press Club in Washington, D.C. on the day of publication.



The Board updated its ADA and ABA guidelines jointly so that they could be made more consistent. The new document features a host of changes that will enhance accessibility, facilitate compliance, and improve usability. Revisions have been made so that the guidelines continue to meet the needs of people with disabilities and keep pace with technological innovations. For example, new provisions for ATMs specify audible output so that people with

vision impairments are provided equal access, and reach ranges have been lowered to better serve people who use wheelchairs and persons of short stature. The guidelines also have a new format and organization and have been extensively edited for greater clarity. Throughout its update, the Board coordinated extensively with model code groups and standard-setting bodies in order to harmonize differences between the guidelines and model building codes.

The Board began the process for this update by establishing an advisory committee charged with reviewing its original ADA Accessibility Guidelines (1991) and recommending changes. Based on this committee's work, the Board published a proposed set of guidelines for public comment. This proposal attracted over 2,500 comments. Considerable input was received from designers and architects, code officials, people with disabilities and organizations representing them, trade and industry groups, and others. As finalized, the guidelines incorporate this extensive feedback.

The Board distributed hundreds of copies of the new guidelines in print and on CD. It also implemented a training program that featured an all-day presentation on the guidelines.

### **Public Rights-of-Way**

In FY 2004, the Board also advanced work on a new set of guidelines that will cover access to streets and sidewalks and other elements found in public rights-of-way. There is a strong need for criteria specifically tailored to this environment since public rights-of-ways present unique challenges to accessibility, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The guidelines being developed cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

The Board spent the year crafting a proposed set of guidelines based on public feedback it received on an advance draft. This draft attracted more than 1,400 comments from the public, including people with disabilities, civil engineers, public works departments, state highway divisions and transportation departments, and leading industry organizations. The Board deliberated on revisions based on this extensive input. This revised version, once published, will provide another opportunity for public comment.

### **Passenger Vessels**

In addition to its guidelines for facilities, the Board also maintains design criteria for public transportation vehicles under the ADA. These guidelines cover various modes of public transportation, including buses, vans, and rail vehicles, among others. In FY 2004, the Board made progress on new guidelines it is developing for various types of water craft, such as ferries, gaming boats, cruise ships, and sightseeing boats. This work focused on preparation of a draft set of guidelines for large vessels, which were made available for comment in November 2004. The Board also released a notice seeking public input on how access to small vessels should be addressed. The draft guidelines are based on a report submitted to the Board by the Passenger Vessel Access Advisory Committee which the Board had created to develop recommendations on the guidelines. This committee investigated various issues concerning access to different types of vessels and included representation from vessel operators and designers, naval architects, and disability groups, among others.

### **Election Assistance Commission Standards for Voting Systems**

The Board often lends its expertise to other organizations in the development of accessibility criteria. In 2004, the Board, along with other agencies, worked with the Election Assistance

Commission on new standards for voting systems. The Commission was created under the Help America Vote Act of 2002, which establishes new requirements for voting systems used in Federal elections, including provisions for access to polling places and voting systems. Under the law, every precinct in the country must have at least one accessible voting machine or system by January 1, 2006.

In implementing these and other reforms of the law, the Commission is overseeing the development of standards for voting systems which include provisions for accessibility. The standards are being developed through several advisory bodies, including a Board of Advisors and a Technical Guidelines Development Committee. Public Board members J.R. Harding, Ed.D. of Tallahassee, Florida and Jim Elekes of Union, New Jersey represented the Board on these two groups. Standards for voting systems are due to be issued by the Commission in 2005.

## **OUTREACH AND PLANNING**

In FY 2004, the Board explored ways of improving its outreach to various audiences and adopted a plan for an issue-focused approach. A new advisory committee on courthouse accessibility was established under this plan. Throughout the year the Board also conducted international outreach and coordination efforts. In addition, it initiated a strategic planning effort to assess Board programs in relation to its mission.

### **Issue-Focused Outreach Plan**

Under an outreach plan it adopted in January 2004, the Board will initiate activities that highlight accessibility within a particular sphere or focus area. These efforts will aim to increase awareness of a particular aspect of accessibility through partnerships with interested agencies and the development and distribution of information and guidance materials. The goal of this program is to increase the visibility of different facets of accessibility in a manner that supplements the Board's technical assistance and training programs, builds partnerships with other entities, improves compliance with access requirements, and showcases best practices for accessible design.

In selecting focus issues, the Board will give priority to subject areas where accessibility has been problematic or not well understood and where supplementary guidance is needed. The Board intends to choose topics that relate directly to any of its guidelines and standards, are manageable in scope, and offer promising partnership opportunities with other agencies and organizations. The Board selected access to courthouses as the first topic adopted under this plan and organized an advisory committee to develop information on the issue.

### **Courthouse Access Advisory Committee**

Elevated spaces within courtrooms, such as judges' benches and witness stands, space limitations, and other constraints have posed challenges to accessibility in courthouses. As a result, courtroom accessibility has been problematic. In October 2004, the Board organized an advisory committee to explore these and other issues and to develop information that will promote courthouse accessibility. The Courthouse Access Advisory Committee will explore issues related to the accessibility of courthouses, particularly courtrooms, including



best practices, design solutions, promotion of accessible features, educational opportunities, and the gathering of information on existing barriers, practices, recommendations, and guidelines.

The committee's 31 members include designers and architects, disability groups, members of the judiciary, court administrators, representatives of the codes community and standard-setting entities, government agencies, and others with an interest in the issues to be explored. The members were selected among applications the Board received in response to a notice published in June. The committee held its first meeting in November 2004.

### **International Outreach and Coordination**

Delegations from other nations periodically consult the Access Board on accessible design in the U.S. and its accessibility guidelines and standards. Many of these meetings concern access to the built environment and, increasingly, information technology. The global standardization necessary for a world wired for the "Information Age" has sparked international interest in the Board's accessibility standards for electronic and information technology. In light of these trends, the Board developed plans to become more proactive in international efforts of outreach and coordination and the advancement of accessibility worldwide.

In March, the Board participated in a video conference organized jointly by the U.S. and the European Commission on the use of Information and Communication Technology standards and the possibilities for governmental cooperation to move toward global requirements. The conference kicked off a transatlantic exchange of information on the planned use of standards in support of regulations and other public policies. The Board also was involved in a new program on accessibility organized by the World Bank. Through a new partnership effort, the World Bank seeks to heighten awareness of, and develop guidance on, accessibility and disability in funded projects, particularly those relating to civil works and infrastructure.

In addition, the Board advised the U.S. Agency for International Development (USAID) on accessibility standards for projects it funds. USAID operates programs and services in over 100 countries to help improve economic growth, agriculture, trade, governance, education, and health. In July, USAID implemented a new policy, in consultation with the Board, which promotes universal design and ensures access according to the Board's new ADA and ABA accessibility guidelines. Under this policy, the Board will serve as USAID's consultative partner in developing and maintaining accessibility requirements and providing technical assistance and training.

### **Strategic Planning**

Board members began a strategic planning effort in September that will evaluate agency programs and activities to ensure that they effectively fulfill the Board's mission. This planning process will be completed in FY 2005.

## **TECHNICAL ASSISTANCE**

The Board provides technical assistance on its design requirements and accessible design through its toll-free telephone line, by fax, and by e-mail. Guidance is available on accessibility as it pertains to the design of facilities, transit vehicles, telecommunications, and electronic and information technology. Most inquiries concerned the Board's guidelines for facility design, including those newly issued under the ADA and ABA, and come from architects, contractors,

code officials, and other members of the building profession. In FY 2004, the Board responded to more than 12,150 technical inquiries.

## TRAINING

In 2004, the Board developed a training program on its new ADA and ABA Accessibility Guidelines. Not long after the guidelines were published, the Board began conducting full-day training sessions at various events across the country. Through these and other training programs, the Board participated in 87 events over the course of the year and trained approximately 6,850 people.

The Board also implemented an informal training program on its section 508 standards, which cover access to electronic and information technology procured by Federal agencies, including computer hardware and software, websites, phone systems, fax machines, copiers, and similar technologies. These weekly training sessions addressed different topics and aspects of the standards and were attended by representatives of various Federal agencies.

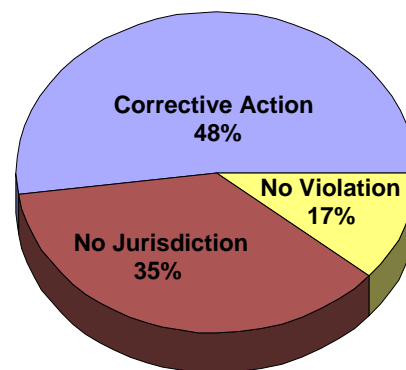
The Board often conducts training in partnership with other organizations. In 2004, the Board partnered with the Marina Operators Association of America (MOAA) to develop a training program on Board guidelines covering access to marinas and boating facilities. This project was unique in that it was structured as a “train the trainer” program and provided participants with the tools to educate the operators of marinas and other boating facilities across the country. The Board developed a resource manual and a slide presentation for use by trainers. The first training session was held at the National Marina and Boating Conference in Ft. Lauderdale, Florida in February 2004.

## ENFORCEMENT

The Board was originally created to develop and enforce design requirements for facilities covered by the Architectural Barriers Act (ABA) of 1968. The ABA requires access to facilities designed, built or altered with Federal dollars. The law covers a wide range of facilities, including post offices, social security offices, and national parks. It also applies to non-government facilities that have received Federal funding, such as certain schools, public housing, and mass transit systems.

The Board enforces the ABA through the investigation of complaints it receives concerning particular facilities. The first step of an investigation is to determine whether the facility is covered by the law. If so, the Board’s next step is to verify whether the facility meets the applicable access standards. If it does not, then the Board will work with the responsible entities to develop a plan to bring the facility into compliance. Cases are closed only after the necessary corrective action is completed.

The Board opened 71 investigations in FY 2004, in addition to 104 cases that were active at the beginning of the fiscal year. Some of these complaints concerned

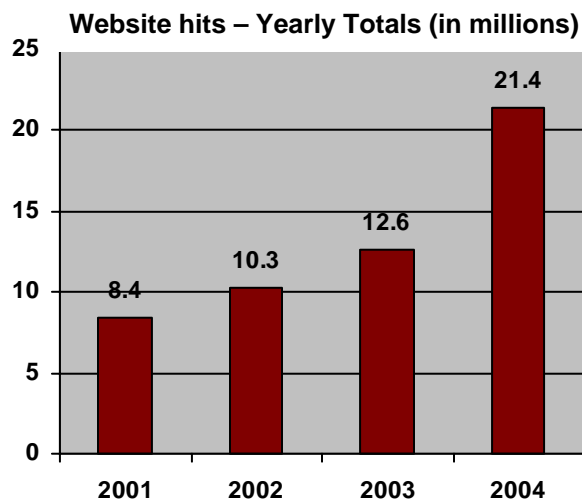


**Cases Closed in FY 2004**

post offices, courthouses and town halls, schools, and office buildings, among others. Over the course of the year, the Board completed 90 investigations. Corrective action was achieved in almost half of the cases (43). In the remaining cases, it was found that the Board lacked jurisdiction (32) or that the access issue did not constitute a violation of the applicable standard (15). However, corrective action was undertaken voluntarily in 10 of these cases.

## PUBLICATIONS AND ON-LINE GUIDANCE

The Board maintains a variety of publications and materials which it makes available free to the public upon request and through its website. This information includes copies of all of its guidelines and standards and related guidance materials, such as technical bulletins, design guides, and manuals. More than 30 such publications are available. In FY 2004, the Board sent out over 2,100 packets of information to its customers. The Board also partnered with different organizations in disseminating its information. For example, in cooperation with the International Health, Racquet, and Sportsclub Association, the Board distributed over 10,000 copies of its guide on accessible sports facilities.



The Board also uses its website at [www.access-board.gov](http://www.access-board.gov) to disseminate published material and guidance on its design criteria and accessible design, including on-line tutorials and answers to frequently asked questions. Throughout the fiscal year, the number of visitors to the Board's website continued to climb. The site totaled more than 1.84 million user sessions and 21.4 million hits over the course of the year.

Since issuing its standards for electronic and information technology in 2000, the Board has maintained a program of continuing on-line guidance and training on the requirements of the standards. Under this program, the Board developed a series of interactive web-based tutorials on different sections of the standards. The tutorials supplement previously released material and provide advanced guidance on how products can conform to the standards. In FY 2004, the Board completed an on-line guide on provisions in the standards for telecommunications products. Information from this guide served as the basis for a web-based tutorial, the last installment in a series of tutorials on the standards available through the [www.section508.gov](http://www.section508.gov) website.

## RESEARCH

Each year, the Board funds research on various aspects of accessibility relating to architecture, communications, and transportation. These projects gather information that is useful to the Board in developing guidelines and promoting accessible design. In FY 2004, the Board funded several new projects, including a synthesis on transfer devices for amusement rides, an industry workshop on field tolerances in construction, and a study on how static electricity generated at



slides and similar play equipment impacts children with cochlear implants. In addition, progress was made on several on-going research projects on indoor air quality, wheeled mobility, and playground surfacing.

### **Indoor Air Quality**

Indoor air quality has become a major concern as a result of a growing number of people who experience debilitating physical reactions from low-level exposures to everyday materials and chemicals found in building products, floor coverings, cleaning products, and fragrances, among others. These include individuals who have developed an acute sensitivity to various types of chemicals, a condition known as Multiple Chemical Sensitivity (MCS). The range and severity of reactions are as varied as the potential triggering agents. In addition, there are those who report reactions from exposures to electrical devices and frequencies, a condition referred to as Electro-Magnetic Sensitivity (EMS).



In response to these concerns, the Board is sponsoring research on how building products, materials, ventilation, and maintenance can impact the quality of indoor environments for people who suffer from MCS and EMS. This project, which is being conducted for the Board by the National Institute of Building Sciences, has brought together various stakeholders to examine the effects of building and construction practices on indoor environments. As part of the project, a panel was established that includes representatives from MCS and EMS organizations, experts on indoor environmental quality, and representatives from the building industry. The panel, which functions as a steering committee for the project, held its first meeting in January 2004. Members discussed various strategies for collecting and disseminating information, selecting focus areas, increasing awareness of the issues involved, broadening participation in the project, developing recommendations for best practices, and identifying potential partners for further study and outreach.

### **Mobility Aids and Human Measures**

The design and functional characteristics of mobility aids have become increasingly diverse over the past few decades. This growing diversity among both mobility aids and people who use them brings into question existing data upon which existing accessibility criteria, particularly design specifications for facilities and vehicles, can be assessed. Reliable data on powered devices and their users is particularly lacking. To fill this knowledge gap, the Board is sponsoring a multi-year project to help develop a database on human measures that takes into account the various types of mobility aids now in use. Initiated in 2002, this project will further work underway by the Rehabilitation Engineering Research Center (RERC) on Universal Design.

The Center has developed and tested protocols for collecting static and dynamic measurements of people who use various types of wheelchairs and scooters. The aim of the project is to establish a database on mobility aids and user sizes and functional task performance that will support the development of three-dimensional digital models of wheelchair and scooter users. The Board's funding broadens the scope of the Center's project by expanding the type of data to be collected. The Board is particularly interested in data on space requirements, maneuvering parameters, reach ranges, and other key measures and dimensions.

In laying the ground work for the project, the Center organized an international workshop on space requirements for wheeled mobility aids that was held in early FY 2004. The conference centered on discussion and assessment of methods for collecting data most appropriate for the project. It attracted experts in the fields of human factors research, data analysis and demographic studies, disability research, and the design of mobility aids, including researchers from Canada, the United Kingdom, and Australia. Papers presented at the workshop included a critical review of recent anthropometry research of wheeled mobility users and assessments of trends and issues in wheeled mobility technologies, disability data and demographics, and lift and ramp technologies. The findings include recommendations to the Center on a project to develop a database on human measures that will take into account the various types of mobility aids now in use. Subsequent phases of the project will involve collecting and organizing data in cooperation with several participating research centers in different geographic locations.

### **Accessible Play Surfacing**

Surfacing at play areas poses challenges to accessibility since materials must be used that are suitable for cushioning falls yet firm and stable enough for wheelchair maneuvering. Choosing materials that are sufficiently accessible is also an important consideration when developing outdoor trails. Guidelines the Board issued under the ADA for play areas address surfacing and reference industry standards for impact attenuation and wheelchair maneuverability.

The Board is sponsoring research on enhancing the accessibility of engineered wood fiber, a popular surfacing material, and various binding agents that can enhance its usability and reduce maintenance. This study, which was initiated in 2002, is being conducted by the U.S. Forest Service's Forest Products Laboratory. In previous phases, researchers analyzed various surface treatments that had the potential of enhancing the firmness and stability of engineered wood fiber. Laboratory testing was conducted on 18 different test bed configurations. The results narrowed the viable candidates down to 8 configurations for further testing, which involved four-foot test beds in Madison, WI that were exposed to a wide range of climatic conditions for 12 months, including freeze-thaw cycles, rain, and heat. Based on the results, two binding agents (synthetic latex and polyurethane) were selected for further testing. This testing, which began in 2004, involves full-scale field assessments at playgrounds in several locations across the country over a 12-month period.